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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,177

09/29/2005

Yoshiaki Hamada

8035-1021

7685

466 7590 12/31/2007  
YOUNG & THOMPSON  
745 SOUTH 23RD STREET  
2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER

LEE, RIP A

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

12/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,177	<b>Applicant(s)</b> HAMADA ET AL.	
	<b>Examiner</b> Rip A. Lee	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01-05-2005</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1-4 in the reply filed on October 23, 2007 is acknowledged.

### ***Claim Objections***

2. Claim 1 objected to because of the following informalities: Please change "reinforced fiber" with "reinforcing fiber." Appropriate correction is required.
3. Claim 1 is objected to because of the following informalities: Please delete "as a sort of." Appropriate correction is required.
4. Claim 1 is objected to because of the following informalities: Please reword the term "and its composition is 10-45 wt %." Furthermore, the basis of the weight percentage is not made clear in the claim. It is not clear whether 10-45 wt % of the spicular inorganic fiber is relative to the total filler or the total composition.
5. Claim 2 is objected to because of the following informalities: Please replace "adds to" with "is added to" and replace "at" with "in an amount of." Appropriate correction is required.
6. Claim 3 is objected to because of the following informalities: Please replace "reinforce" with "reinforcing." Appropriate correction is required.
7. Claim 3 is objected to because of the following informalities: The diction is awkward, and likely a result of literal translation. Applicant is encouraged to rewrite the claim. Appropriate correction is required.

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8. Claim 4 is objected to because of the following informalities: A suggestion is made to rewrite the claim using the phrase "has a major axis length of 40-200  $\mu\text{m}$ " or some similar phrase. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims are drawn to a gasket containing spicular inorganic fiber, of which there are hundreds, if not thousands of materials that fall under this general category. The examiner has turned to the specification for guidance. Paragraphs [0027], [0028], and [0070], as well as Tables 1-7 of the working examples shows magnesium silicate hydrate as the sole embodiment of spicular inorganic fiber. Accordingly, it is not clear what scope of protection is being sought by Applicant because the identity and chemical constitution of claimed articles containing spicular inorganic fiber other than magnesium silicate hydrate is not made clear in the claim.

11. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims are drawn to a gasket with implied structure (pressurized laminating), but there is no indication in the claim what the claimed composite is comprised of. The specification is devoid of description other than "front surface layer," "middle layer," and "back surface layer." Therefore, the identity and constitution of the claimed material is not made clear in the claim.

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***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amano *et al.* (U.S. 5,180,631).

Example 5 of Amano *et al.* discloses a composition comprised of nitrile butadiene rubber, magnesium sulfate whisker (15 wt %), carbon fiber (4 wt %), inorganic fillers, and polycarbodiimide pulp. The composition is made into sheets, and a laminate is prepared with two sheets containing a ceramic fiber layer in between by hot-pressing. While the reference is silent with respect to curing, it is noted that vulcanizing agent, antioxidant, and plasticizer is routinely incorporated into the compositions (col. 2, line 40), and one having ordinary skill in the art would have found it obvious to cure the rubber in order to obtain a useful product. Therefore, it would have been obvious to make the sheet of example 5 containing vulcanizing agent, antioxidant, and plasticizer. Other compositions have been prepared using gypsum whisker (examples 6 and 8). Inventive materials are used as joint seat for making gaskets (col. 1, line 2).

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15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amano *et al.* in view of Honda *et al.* (U.S. 3,968,198).

The discussion of the disclosures of the prior art from the previous paragraph of this office action is incorporated here by reference. Amano *et al.* is silent with respect to the antioxidant component. However, at the time the invention was made, use of phenolic antioxidant was well-known in the art. For instance, Honda *et al.* shows that rubber compositions are adequately stabilized with about 3 wt % of phenolic antioxidant (table in col. 18). Therefore, it would have been obvious to one having ordinary skill in the art to use phenolic antioxidant in the rubber composition of Amano *et al.*, and one having ordinary skill in the art would have expected the antioxidant to impart stabilizing properties. The combination is obvious because Amano *et al.* prescribes use of antioxidant, and Honda *et al.* provides an otherwise obvious missing element.

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amano *et al.* in view of Kubota (JP 6-279689).

Amano *et al.* is silent with respect to the length of magnesium sulfate whisker that is suitable for preparing inventive compositions. Kubota discloses magnesium sulfate whisker having an average length of up to 10-100  $\mu\text{m}$  which are commercially available; see paragraphs [0014] and [0023]. One having ordinary skill in the art, having no capacity to make magnesium silicate whisker, would have found it obvious to purchase and use the magnesium silicate whisker shown in Kubota. And absent any showing of criticality of unexpected results, one having ordinary skill in the art would have expected use of commercially available magnesium silicate whisker to work with a reasonable expectation of success.

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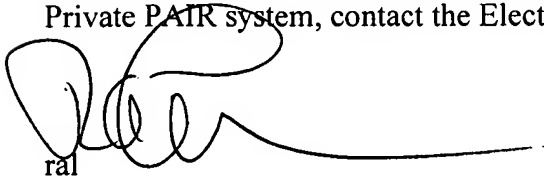
17. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spillner *et al.* (U.S. 5,306,553).

Spillner *et al.* discloses a gasket material comprised of 3-10 wt % of nitrile-butadiene rubber, 2-20 wt % of synthetic organic filler, 10-70 wt % of a first filler having a maximum grain size of 0.01 mm, 10-70 wt % of a second filler having a maximum grain size of 0.01 mm and which is needle shaped, and 0.5-1 wt % of zinc oxide (claims 1-4). The synthetic organic fiber is polyaramid, and the second filler is magnesium aluminum silicate. The gasket is prepared by laminating a pair of fiber mats comprising said composition between a reinforcing member (col. 3, lines 46-49).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu S. Jagannathan, can be reached at (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



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December 24, 2007